

AMENDMENTS TO THE CLAIMS

Kindly amend Claims 1, 2, 5, 6, 8, 11, 18-21, 24 and 31-36, as follows.
Kindly cancel Claims 17, 30, and 37 while preserving the right of reentry of these
Claims into this or any other appropriate application. Kindly add new Claims 38,
39, and 40 into this application.

1 (currently amended). A drive roll adapted and configured to feed weld
wire, said drive roll comprising:

- (a) opposing first and second sides; and
- (b) a drive roll body extending between the first and second sides, said drive roll body and having an outer circumferential body surface extending about a periphery of said body; and thereabout between the first and second sides, and about a periphery of the outer body surface, the outer body surface comprising a base body surface, and at least one elevated wire interface extending outwardly from, and along, at least a major circumferential portion of the base body surface
- (c) an elevated wire interface, for conveying a weld wire, said elevated wire interface displaced radially outwardly from the outer circumferential body surface.

2 (currently amended). A drive roll as in Claim 1, further comprising first
and second elevated wire interfaces extending outwardly from, and along, at
least a major circumferential portion of the base outer circumferential body
surface, and separated from each other.

3 (original). A drive roll as in Claim 1 wherein said at least one elevated wire interface is adjacent, but displaced from, at least one of the first and second sides.

4 (original). A drive roll as in Claim 2 wherein at least one of said elevated interfaces is adjacent, but displaced from, at least one of the first and second sides.

5 (currently amended). A drive roll as in Claim 1, said first and second elevated wire interfaces generally defining a channel therebetween, the channel optionally having a bottom corresponding with said base outer circumferential body surface.

6 (currently amended). A drive roll as in Claim 1 wherein said at least one elevated wire interface comprises first and second elevated circumferential peaks, spaced laterally from each other, and a groove therebetween, and wherein a cross-section configuration of the groove corresponds in magnitude to a diameter of such weld wire for which said drive roll is designed and configured.

7 (original). A drive roll as in Claim 2 wherein at least one said elevated wire interface comprises first and second elevated circumferential peaks, spaced laterally from each other, and a groove therebetween, and wherein a cross-section configuration of the groove corresponds to a diameter of such weld wire for which said drive roll is designed and configured.

8 (currently amended). A drive roll as in Claim 1, said elevated wire interface defining a wire interface diameter, the base outer circumferential body surface defining a body diameter, and magnitude of the wire interface diameter being greater than magnitude of the body diameter.

9 (original). A drive roll as in Claim 1, further comprising at least one rim extending outwardly from the base body surface.

10 (original). A drive roll as in Claim 9 wherein said at least one rim defines a rim diameter having a magnitude greater than each of the magnitudes of body diameter and wire interface diameter.

11 (currently amended). A drive roll as in Claim 1, said at least one elevated wire interface comprising a circumferential groove extending inwardly from an outer-most portion of said elevated wire interface, to a lower-most portion of said elevated wire interface, the lower-most portion of said elevated wire interface being displaced outwardly, in said drive roll, from the base said outer circumferential body surface.

12 (original). A drive roll as in Claim 1, said at least one elevated wire interface comprising first and second elevated circumferential peaks, spaced laterally from each other, and a circumferential groove therebetween, and wherein the circumferential groove defines an arcuate cross-section.

13 (original). A drive roll as in Claim 11 wherein the circumferential groove defines a generally angular cross-section.

14(original). A drive roll as in Claim 9 wherein an outermost surface of said rim, from an axis of rotation of said drive roll, defines a generally planar or arcuate profile.

15 (original). A wire feeder assembly adapted and configured to feed weld wire, said wire feeder assembly comprising a drive roll as in Claim 1.

16 (original). A welding system comprising a wire feeder assembly as in Claim 15.

17 (canceled).

18 (currently amended). A drive roll adapted and configured to feed weld wire, said drive roll comprising:

- (a) opposing first and second sides which define a width dimension therebetween; and
- (b) a drive roll body extending between the first and second sides, said drive roll body having an outer circumferential body surface extending ~~thereabout~~ between the said first and second sides, ~~the outer body surface comprising a base body surface~~, and

(c) at least one rim extending radially outwardly from, and along, at least a major circumferential portion of, the ~~base~~outer circumferential body surface, said at least one rim having an outermost surface displaced a maximum distance of said rim, away from an axis of rotation of said drive roll defining a diameter which is greater than the remaining diameters measured along the width of said drive roll.

19 (currently amended). A drive roll as in Claim 18, further comprising at least one elevated wire interface extending outwardly from, and along, at least a major circumferential portion of ~~the base~~ said outer circumferential body surface.

20 (currently amended). A drive roll as in Claim 19, said at least one rim and said at least one elevated wire interface being laterally separated from each other by a distance therebetween which includes at least a portion of ~~the base~~ said outer circumferential body surface.

21 (currently amended). A drive roll as in Claim 19 wherein said at least one elevated wire interface extends outwardly from ~~the base~~ said outer circumferential body surface a first distance (D3) at a given locus on the periphery of the ~~outer body surface~~ drive roll and wherein said at least one rim extends outwardly from ~~the first base~~ said outer circumferential body surface a second distance (D4) at the given locus on the periphery of the ~~outer body surface~~ drive roll, the magnitude of distance (D3) being less than the magnitude of distance (D4).

22 (original). A drive roll as in Claim 18 wherein said at least one elevated wire interface is spaced from both of the first and second sides.

23 (original). A drive roll as in Claim 21 wherein said at least one of rim is at or proximate at least one of the first and second sides.

24 (currently amended). A drive roll as in Claim 19 wherein said at least one elevated wire interface has a circumferential groove extending inwardly from ~~an outermost portion of the outer body surface at respective first and second peaks of said elevated wire interface thereinto.~~

25 (original). A drive roll as in Claim 18 wherein the outermost surface of said rim defines a generally planar or arcuate profile.

26 (original). A drive roll as in Claim 21 wherein the outermost surface of said rim defines a generally planar or arcuate profile.

27 (original). A drive roll as in Claim 23 wherein the outermost surface of said rim defines a generally planar or arcuate profile.

28 (original). A wire feeder assembly adapted and configured to feed weld wire, said wire feeder assembly comprising a drive roll as in Claim 18.

29 (original). A welding system comprising a wire feeder assembly as in
Claim 28.

30 (canceled).

31 (currently amended). A drive roll adapted and configured to feed weld
wire having a predetermined diameter, said drive roll ~~having an axis of rotation,~~
~~and comprising:~~

- (a) opposing first and second sides,
- (b) a drive roll body extending between the first and second sides, said
drive roll body having a generally circumferential outer surface, and
~~the generally circumferential outer surface comprising a first~~
~~circumferentially extending portion thereof, having a first radius~~
~~from the axis of rotation, and further comprising at least first,~~
~~second, and third circumferentially extending recesses in the~~
~~generally circumferential outer surface, extending radially inwardly,~~
~~toward the axis of rotation, from the first circumferentially extending~~
~~portion.~~
 - (i) a groove for conveying such weld wire having a
predetermined diameter, said groove extending
circumferentially about said drive roll and defining a first
cross-sectional configuration;
 - (ii) a recess extending circumferentially about said drive roll,
adjacent and generally parallel to said groove, said recess
defining a second cross-sectional configuration which differs
from said first cross-sectional configuration;

said groove and recess defining a distance therebetween, the magnitude of said distance being less than the magnitude of the weld wire diameter.

32 (currently amended). A drive roll as in Claim 30 31 wherein at least one of said first, second, and third recesses extends about the entirety of a periphery of said drive roll said groove defines first and second lateral support walls on opposite sides thereof, said first and second lateral support walls converging toward each other.

33 (currently amended). A drive roll as in Claim 30 32 wherein at least one of said at least first, second, and third recesses defines a cavity disposed inwardly from the first portion of the generally circumferential outer surface, the cavity being compatible with such weld wire having such predetermined diameter, such that the respective recess comprises a groove one of said first and second lateral support walls intersects said groove, defining a peak therebetween.

34 (currently amended). A drive roll as in Claim 30 32 wherein a first elevated wire interface is disposed between the first and second recesses, such that the first and second recesses comprise channels each of said first and second lateral support walls intersects said groove, defining first and second peaks, respectively, therebetween.

35 (currently amended). A wire feeder assembly adapted and configured to feed weld wire, said wire feeder assembly comprising a drive roll as in Claim 30 31.

36 (currently amended). A welding system comprising a wire feeder assembly as in Claim 30 31.

37 (canceled).

38 (new). A drive roll as in Claim 31, said drive roll comprising first and second grooves for conveying weld wire, said first and second grooves extending circumferentially about said drive roll and said first and second grooves laterally spaced from each other.

39 (new). A drive roll as in Claim 31 wherein said groove defines a lowermost portion thereof which is proximate an axis of rotation of said drive roll, said groove lowermost portion being radially outwardly spaced from said circumferential outer surface.

40 (new). A drive roll as in Claim 31, further comprising at least one rim extending radially outwardly from said circumferential outer surface.